IN THE CLAIMS:

Please cancel claims 18, 21, and 41-46 without prejudice, and amend the claims as follows:

Claims 1-7 (Cancelled).

8. (Previously Presented) A method for processing a substrate in a processing chamber, comprising:

(a) exposing a patterned substrate surface to a plasma generated from a gas mixture consisting of argon, helium and hydrogen; and

(b) increasing the helium content of the plasma to increase etching of the patterned substrate surface, wherein the gas mixture comprises less than about 75% by volume of argon.

9. (Cancelled).

10. (Previously Presented) The method of claim 8, wherein the hydrogen is provided to the processing chamber in a mixture of about 95% by volume of helium and about 5% by volume of hydrogen.

11. (Original) The method of claim 8, wherein the substrate surface comprises silicon oxide or silicon nitride.

12. (Original) The method of claim 8, wherein the plasma is capacitively and inductively powered.

13. (Previously presented) The method of claim 8, wherein the gas mixture is introduced into the processing chamber to establish a pressure from about 1 mTorr to about 200 mTorr.

14. (Previously Presented) A method for processing a substrate, comprising:

(a) exposing a patterned substrate surface to a plasma generated from a gas mixture comprising argon, helium and hydrogen in a processing chamber, wherein the plasma is capacitively and inductively powered; and

(b) increasing the helium content to increase etching of the patterned substrate surface, wherein the gas mixture comprises less than about 75% by volume of argon.

15. (Previously Presented) The method of claim 14, wherein the hydrogen is provided to the processing chamber in a mixture of about 95% by volume of helium and about 5% by volume of hydrogen.

16. (Previously presented) The method of claim 14, wherein the substrate surface comprises silicon oxide or silicon nitride.

17. (Previously Presented) The method of claim 14, wherein the gas mixture is introduced into the processing chamber to establish a pressure from about 1 mTorr to about 200 mTorr.

18. (Canceled)

19. (Previously Presented) The method of claim 8, wherein the gas mixture comprises between about 25% and about 75% by volume of argon.

20. (Previously Presented) The method of claim 14, wherein the gas mixture comprises between about 25% and about 75% by volume of argon.

21. (Canceled)

22. (Original) The method of claim 8, wherein the plasma is generated by delivering a power level of between about 10 watts and about 500 watts to the processing chamber.

23. (Original) The method of claim 14, wherein the plasma is generated by delivering a power level of between about 10 watts and about 500 watts to the processing chamber.

Claims 24-30. (Cancelled).

31. (Original) A method for processing a substrate in a processing chamber, comprising:

(a) exposing a patterned substrate surface at a pressure between about 5 mTorr and about 20 mTorr to a plasma generated from a gas mixture consisting of argon, helium and hydrogen at a power level between about 300 watts and about 450 watts; and

(b) increasing the helium content of the plasma to increase etching of the patterned substrate surface, wherein the gas mixture comprises less than about 75% by volume of argon.

32. (Previously Presented) The method of claim 31, wherein the patterned substrate comprises a feature having an aspect ratio greater than about 4 to 1.

33. (Original) The method of claim 31, wherein the gas mixture comprises about 50% by volume of argon, about 48% by volume of helium, and about 2% by volume of hydrogen.

34. (Original) The method of claim 31, wherein the gas mixture comprises about 25% by volume of argon, about 71% by volume of helium, and about 4% by volume of hydrogen.

35. (Original) The method of claim 31, wherein increasing the helium content of the plasma decreases the argon content of the plasma.

36. (Previously presented) A method for processing a substrate in a processing chamber, comprising:

exposing a patterned substrate surface at a pressure between about 5 mTorr and about 20 mTorr to a plasma generated at a power level between about 300 watts and about 450 watts from a gas mixture consisting of less than 75% by volume of argon and a mixture of about 95% by volume of helium and about 5% by volume of hydrogen; and

increasing the helium content of the plasma while decreasing the argon content of the plasma.

37. (Previously Presented) The method of claim 36, wherein the patterned substrate comprises a feature having an aspect ratio greater than about 4 to 1.

38. (Original) The method of claim 36, wherein the gas mixture comprises about 50% by volume of argon, about 48 % by volume of helium, and about 2% by volume of hydrogen.

39. (Original) The method of claim 36, wherein the gas mixture comprises about 25% by volume of argon, about 71% by volume of helium, and about 4% by volume of hydrogen.

Claims 40-46 (Cancelled.)

47. (Currently amended) A method for processing a substrate, comprising:

depositing a conductive or semiconductive sublayer;

depositing a dielectric layer on the sublayer;

etching the dielectric layer to expose at least a portion of the sublayer and to form a patterned substrate surface;

exposing the patterned substrate surface to a plasma generated from a gas mixture consisting of argon, helium and hydrogen;

increasing the helium content of the plasma to increase etching of the patterned substrate surface, wherein the gas mixture comprises less than about 75% by volume of argon; and

depositing a metal interconnect layer on the dielectric layer.

48. (Currently amended) The method of claim [[46]] 47, wherein the conductive or semiconductive sublayer comprises a material selected from the group consisting of germanium, silicon, aluminum, copper, and titanium nitride.

49. (Currently amended) The method of claim [[46]] 47, wherein the dielectric layer comprises silicon oxide or silicon nitride.

50. (Currently amended) The method of claim [[46]] 47, wherein the argon content of the plasma decreases from about 75% by volume to about 25% by volume.